

Amendment under 37 C.F.R. § 1.111  
Application No. 10/827,311  
Attorney Docket No. 042348

**AMENDMENTS TO THE SPECIFICATION**

Please amend the specification as follows:

**Amend the paragraph beginning on page 5, lines 13-22 as follows:**

In this configuration, the cylindrical detector element 51 does not follow exactly the contour of the log E including a convex portion E1 and a concave portion E2, due to the geometrical characteristics of the detector element. The resultant contour data would thus represent a solid line f shown in Fig. 8(b), which is different from the real contour of the log as indicated by a broken line g. Thus, a most appropriate optimum yield axis that is desired cannot be obtained ~~form~~ from such contour data. If the shape of the detector tool were to be modified such that the tool would follow even the bottom of the concave portion, the tool would be stuck with the concave or convex portions and the log would be prevented from rotating smoothly, thereby making the detection impossible.

**Amend the paragraph beginning on page 11, lines 9-19 as follows:**

Numeral 11 ~~designate~~ designates a plurality (5 in the illustrated example) of contact-swinging detection members disposed along the axis of the log M. Each detection member is pivotally supported at its base portion by a support element 12 and a support axle 13 rotatably fitted in the support element 12, which is secured to the support frame 10. Planar detector elements 14 are provided at the tip of the individual detection members 11 such that the detector elements 14 are disposed side by side virtually without any spacing therebetween along the axis

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of the log M as they come into contact with the periphery of the log. For the purpose of clarifying the swinging movement, the detection members 11 are shown in a raised position in Fig. 1, while in Figs. 2 and 3 they are shown in a lowered position.

Please amend the abstract as follows:

[[A]] An ~~method and~~ apparatus for centering a log to allow [[a]] an optimum yield axis and a maximum radius of rotation of the log to be calculated more accurately than conventionally possible. The angle of rotation of a log M is detected by a rotation angle detector [[6]] that is engaged with a preliminary axis c about which the log M is rotated. A contour of the log for calculating the optimum yield axis of the log and a contour for calculating the maximum radius of rotation of the log are measured separately. The contour for calculating the optimum yield axis is measured in a fixed-point manner by measuring the log at a plurality of certain measurement points with beam reflection scanners [[8]] ~~disposed at appropriate intervals along the axis of the log M.~~ The contour for calculating the maximum radius of rotation is measured in a comprehensive manner ~~by measuring the log in a plurality of measurement sections allocated on the log along the axis thereof with virtually no gap therebetween;~~ using swing-angle detectors [[15]] engaged with contact-swinging detection members provided individually in the plural measurement sections.